

Scottsdale Road Corridor Drainage Master Plan

March 19, 2002 Public Meeting

The following is a summary transcript of the questions, comments and responses.

Q: Are plans and future construction dependent on municipalities' approval?

A: Yes. Any of the preliminary alternatives would have to be endorsed by the local municipality in which it is located.

Q: How big are the study area and focus area?

A: The study area is almost 10 square miles and the focus area is about 1 ½ square miles.

Q: Must all three cities plus the District agree before anything is built?

A: The city (or town) in which the proposed flood control improvement would be built needs to sponsor the improvement and the District must agree with the project if they are funding part of its construction. The City of Phoenix, for example, would not need to agree with the project if the proposed improvements were located in Scottsdale and Phoenix were not impacted or benefited in any way by them.

Q: Mescal and Cactus Park detention basins were supposedly built to handle the 100-year storm. Why don't they?

A: These basins were built as large as they could be with the amount of available land and budget at the time they were constructed. A 100-year storm was used in the analysis of their function so in that way they do "handle" the 100-year storm. However, that does not mean that they can hold the entire storm. The original design storms were based on different criteria than we have now and, at the time, the contributing drainage area was still largely undeveloped desert land. Hydrology and design criteria and the physical characteristics of the contributing drainage areas have changed somewhat over the years.

Q: Is the U.S. Army Corps of Engineers involved in this study? Do we need their approval?

A: The Corps is not sponsoring or funding the study in any way and it is not envisioned that they will be involved in the implementation of any of the alternatives. There may be some environmental permitting issues that the Corps could become involved in from a regulatory standpoint.

Q: Will it be 5 – 7 years before construction? It seems like time is of the essence and facilities should be built sooner.

A: The length of time it will take to construct the project will depend on what alternative is chosen and the amount of funding that is available from the municipalities and the District. It is possible that construction of the most expensive alternative could take even longer than 7 years. It is possible that certain features can be broken out of the recommended alternative and constructed in phases. Priorities and budgets can also potentially shift resulting in some of the individual features being constructed either sooner or later than the 5 – 7 year time frame.

Q: The area has built-out creating more flood problems (comment).

A: As an area develops, there is a tendency for drainage patterns and the frequency and volume of storm runoff to change. Before development, when this area was desert, there were many shallow washes. As an area develops, there tend to be fewer more concentrated drainage corridors. These corridors tend to become established along major streets, in this case, the north-south streets. In much of the early development, there was little or no stormwater detention required which tends to increase the amount and frequency of runoff. In the past several years, there have been many, many stormwater basins and channels constructed, both privately and on public land. These facilities have provided many benefits but sometimes fall short of their desired objectives because of funding and the lack of available land.

Q: Did the Berneil Ditch overflow at Chaparral High School? Was the water out of the ditch north of the high school?

A: The Berneil Ditch has overflowed historically over the south bank of the earth reach in the Mountain View Road alignment (just south of Chaparral High School) and over the south bank at the second bend

in the ditch about 1000 feet south of Chaparral High School. This has occurred as recently as the mid-1990's. To our knowledge, the Berneil Ditch has never overflowed on its north side. The study team is aware of a local drainage problem that existed along Gold Dust Avenue just north of the Chaparral High School athletic field a few years ago. This situation involved runoff ponding in the street but it was apparently corrected with the construction of a shallow "daylight" channel to take this runoff south into the school.

Q: What was not done in the previous study when Cactus and Mescal park detention basins were built?

A: These basins were constructed as large as possible and will handle a 10-year storm without overflowing. Their performance was evaluated for a 100-year storm but neither is capable of holding that volume and will overflow if that event occurs. Neither basin has an overflow spillway constructed that can safely pass a storm that is severe enough to cause overflow.

Q: Has water from out of the corridor area been channeled into it?

A: The Scottsdale Road corridor has historically been a drainage corridor collecting runoff primarily from the north and northeast. Changes in drainage patterns over the years have concentrated a larger contributing drainage area along the Scottsdale Road corridor. To compensate for this, regional detention basins like the Scottsdale Airport Basin, Cactus and Mescal Park Basins have been constructed to hold runoff and reduce the rate of stormwater discharged downstream. In addition, large regional channels and storm drains like the 71st Street Channel and the channels and storm drains along Scottsdale Road have been constructed to convey the flow along the major corridors.

Q: What has happened in the last 10 years as the area was built out to create these problems?

A: Most of today's flooding and drainage problems stem from earlier than ten years ago. The Berneil Ditch and the 71st Street Channel, for example, are much older than that. These features, for the most part, were constructed before there were any regional studies. Some of the older drainage infrastructure that was constructed based on regional studies is simply not big enough because of budget and land constraints. Construction of the Central Arizona Project canal and the associated detention basins just north of it helped immensely to reduce the amount of area that historically contributing drainage to the study area. All of the regional stormwater basins in the study area have also helped to mitigate flooding. All of the privately constructed stormwater basins in the Scottsdale Airpark area and in the Kierland development that are required by Scottsdale and Phoenix drainage regulations in the last 10 years have benefited the study area tremendously. But certain locations along the older drainage infrastructure are inadequate for a variety of reasons. These locations are the target of the Scottsdale Road Corridor Drainage Master Plan study.

Q: We have been fortunate that we haven't had a 100-year storm (comment).

A: As most people know, rainfall comes in seasonal and climatological cycles. We have generally been in a dry pattern recently. The storm photographs that were displayed in the power point presentation were taken shortly after one of the larger recent rainfalls that occurred in October of 2000. However, this was probably not more than about an inch of rain and it only covered part of the drainage area. Historically, we know that much more severe events can occur.

Q: How much of water has been "moved" to this area, out of the natural flow? Did someone decide where the water would be channeled? Will any more water/storm flows be brought into the area?

A: It's difficult to quantify with any certainty the exact changes in drainage patterns between now and say, 20, 30 or 40 years ago. Shifts in local drainage patterns have undoubtedly evolved over the years. Generally, the larger regional drainage outfalls like the 71st Street Channel and the Berneil Ditch have been established for a long time. Their locations and alignments were influenced by many factors. And generally, regional channels, storm drains and detention basins have been able to offset the impacts that development has had on runoff over the years. The focus of the Scottsdale Road Corridor Drainage Master Plan Study has not been so much to assess what went wrong but more to concentrate on where the problems are and what can be done to address them. At this point in time, the study area is essentially completely developed and all drainage patterns, large and small are set. There are no further shifts in drainage patterns anticipated or new drainage that will be "moved" into the area.

- Q:** Do the developers have to have drainage plans?
- A:** Yes. The requirements vary slightly depending on what municipality the development is located in and the size and type of development. Requirements have also varied over the years. Thirty years ago, it was rare to see any stormwater detention basins incorporated in any development project. Now, it is a common practice. Developers are also required to show how they will receive and convey offsite flows through their development. The Jewish Community Campus currently under construction at the southeast corner of Scottsdale Road and Sweetwater Avenue is a good example of the current state of design requirements for new development. Offsite flow is received and discharged at historical locations and stormwater detention is provided for onsite runoff.
- Q:** Where will the monies come from to build these proposed facilities? How is the City of Scottsdale going to help fund this project considering all the city's other needs?
- A:** The most probable sources of funding will be from the City of Scottsdale, Town of Paradise Valley and the Flood Control District. Other potential funding sources will be investigated more thoroughly near the later stages of the study. The evaluation of funding sources will also consider what specific Scottsdale or Paradise Valley budget could be used along with when and how much funding would be available from each budget. Also near the end of the study, each of the specific improvement features that are recommended for construction will receive a priority ranking. It will then be up to each funding entity to prioritize the improvements from the Scottsdale Road Corridor Study with all of their other budget constraints and demands.
- Q:** What is the direct taxable impact to the property owners in the study area? Is the cost borne by the entire county?
- A:** All property owners in Maricopa County contribute tax revenue to the Flood Control District of Maricopa County. Part of this revenue is used to construct new flood control improvements county-wide. The Scottsdale and Paradise Valley revenue that is typically used to construct public improvements also comes from community-wide sources. The construction improvements that come from the Scottsdale Road Corridor Drainage Master Plan could be funded by a number of community based budgets that would not directly impact residents in the benefit area along the Scottsdale Road corridor any more than they currently are. The construction of regional and even local drainage improvements is typically not funded through special neighborhood assessments that would directly impact property owners adjacent to the improvements.
- Q:** At what point is the decision made on which alternative? Does the entire population of Maricopa County have a vote? How is it going to be decided on which alternative is selected?
- A:** The recommended alternative will be chosen within the month or so following the second public involvement meeting. The study team will choose the recommended alternative based on input from the public and based on objective evaluation criteria developed for this study. The study team consists of representatives from the Flood Control District, Scottsdale, Paradise Valley, Phoenix and consultants Stanley and Logan-Simpson Design. Although anyone in Maricopa County is free to provide input to the study, the study team is most interested in feedback from property owners in the focus area. The decision process is not put to a vote of the County's general population. The alternative that is chosen may be one of the five alternatives that were presented at the second public involvement meeting or it may be a combination of the best sub-alternative features selected at each of the primary flood problem locations.
- Q:** Is the project connected to FEMA? Does the plan have to be approved by FEMA (Federal Emergency Management Agency)? Will the District undertake a floodplain study that will require flood insurance?
- A:** FEMA may be indirectly aware of the study through their community rating system but they are not a participant, they are not connected to the study and they are not funding any part of it. FEMA's approval is not required and will not be sought. This is a local project. There are flood prone areas associated with some of the deficient regional drainage infrastructure. These areas have been approximated on one of the figures included at the study's website. These flood prone areas are somewhat extensive but generally shallow in nature. If less than a 100-year alternative is recommended through this study, portions of these flood prone areas will remain. Although the City of Scottsdale has a general public obligation to inform

residents that they may be subject to flooding, there are no plans at this time to formally delineate the flood prone areas and officially adopt them as floodplains approved by FEMA and requiring flood insurance. The City of Scottsdale recognizes that mapping floodplains is a sensitive community issue with potential economic and property value impacts. Any future plans to delineate floodplains in the study area would be closely coordinated with the community and would include extensive public involvement.

Q: Who takes care of channels and who pays for overtopping and property damage?

A: The Berneil Ditch is owned and maintained by the Town of Paradise Valley. The 71st Street Channel is mostly owned by private individuals and corporations and is maintained by a combination of those private owners and the City of Scottsdale. If overtopping occurs, the cost to repair flood damage to buildings and private structures would be up to the private owner and their insurance company. Flood insurance is available for structures at a very nominal rate.

Q: Will the funded alternative go to a bond that will require people to vote? No one would vote to protect the small focus area (comment).

A: Bond financing would be one of the potential funding mechanisms. Any new bonds would more than likely require a vote from the community.

Q: Have funds for this study been allocated from the city and from the District? Does this study include topographic mapping?

A: The Flood Control District of Maricopa County and the City of Scottsdale have jointly funded the cost of the Scottsdale Road Corridor Drainage Master Plan study. There was no new topographic mapping acquired for the study. The study is based on existing 2-foot contour mapping in the City of Scottsdale and USGS 10-foot contour mapping for the whole study area.